# **ONKYO** SERVICE MANUAL

# SYNTHESIZED FM STEREO/MW/LW TUNER MODEL T-4038L



#### Silver and black models

UG.BUG	220V AC. 50Hz			
UW.BUW	120 or 220V AC, 50/60Hz			
BUQA	240V AC. 50Hz			

#### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK & ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

### TABLE OF CONTENTS

•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠		•			•	· -
res	٠	•	٠		٠	•	•	٠	•	٠	•	•	٠	•	٠	•	•		•	•			. 2
•	٠	•		•	•	•	•	•	•	٠	•	٠	٠	٠	•	•	•					•	. (3
	•	•		٠		•	•	•	•	•	٠	٠	•	٠	•	٠	٠		٠	٠			• 4
•	•		•	٠	•	٠	•	٠	•	٠	٠	•	•	٠	٠		•		٠	٠		•	• 5
	٠	•	•	•	•	•	•	٠	•		٠	•	•	٠	•		•	٠	•	٠			• 6
on	•		٠	•	•	•	•	٠	•	•	٠	٠	٠	٠	٠	•				٠		•	. 7
ed	ure	S	•	•	•	•	•	٠	•	٠	٠	٠	•	٠	•	•	•	•	•	٠		•	. 9
of	IC	•	•				•	•	•	•		•	•	٠	•	•	٠	٠	٠	•	٠	٠	12
oar	ts	lis	st																				
•		٠					•	•		•	•	•	•	•	•	•	٠	•	•	٠	٠	٠	14
W.		•					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	15
ts	lis	:t •	•			•	•	•	•	٠	٠	•	•	•	•	•	•	٠	•	٠	•	•	19
am		•					•	•	٠	•	٠	•	•		•	•	•	•	•	٠	•	•	17
֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜	on ced of parts	on cedure of IC parts	on cedures of IC coarts list	on · · · · · · · · · · · · · · · · · · ·	on cedures of IC coarts list	on	on	on	on cedures of IC coarts list	on edures of IC oparts list write list am													



#### **SPECIFICATIONS**

FM:

Tuning Range:

87.5-108.0MHz (50kHz steps)

Usable Sensitivity:

11.2dBf, 2.0µV,IHF

Stereo:

0.9 μV 75ohms DIN 2.0 μV 75ohms

50dB Quieting Sensitivity: Mono: 1.7 µV 750hms

 $17\mu V$  75ohms

Stereo: 1.5dB

Mono:

Capture Ratio: Image Rejection Ratio: IF Rejection Ratio:

80dB

Stereo:

90dB Mono:

Signal-to-Noise Ratio:

73dB

66dB

Selectivity:

55dB DIN ( $\pm 300$ kHz,40kHz devi.) 50dB

AM Suppression Ratio: Harmonic Distortion:

Mono: 0.1%

0.2%

Frequency Response:

Stereo: 30-15,000Hz ±1.5dB

Stereo Separation:

40dB at 1kHz 30dB at 70-10,000Hz

Output voltage:

750mV

Muting level:

2 uV MW

AM Tuning Range:

522-1,611kHz (9kHz steps)

Usable Sensitivity: Image Rejection Ratio:  $25 \mu V$ 

IF Rejection Ratio: Signal-to-Noise Ratio: 40dB 30dB 40dB

Harmonic Distortion: Output voltage:

0.8%150mV

**GENERAL** Dimensions(W $\times$ H $\times$ D):

435 ×73×265mm

 $17-1/8" \times 2-7/8" \times 10-7/16"$ 3.0kg., 6.6lbs.

Weight: Specifications and features are subject to change without notice. LW

146-353kHz (9kHz steps)

 $40\mu V$ 30dB 30dB 40dB 0.8% 150 mV

## SERVICE PROCEDURES

#### 1.Step band selector switch

Worldwide models are equipped with a step band selector switch. This switch is located on the back panel. This switch is set to 50kHz (FM) and 9kHz (AM) at the factory. but may have to be reset to 100kHz and 10kHz depending on the area where the unit is used.

De-emphasis FM step 50kHz

AM step

Europe: U.S.A.:

50µsec 75µsec

100kHz

9kHz 10kHz

#### 2.Change of voltage

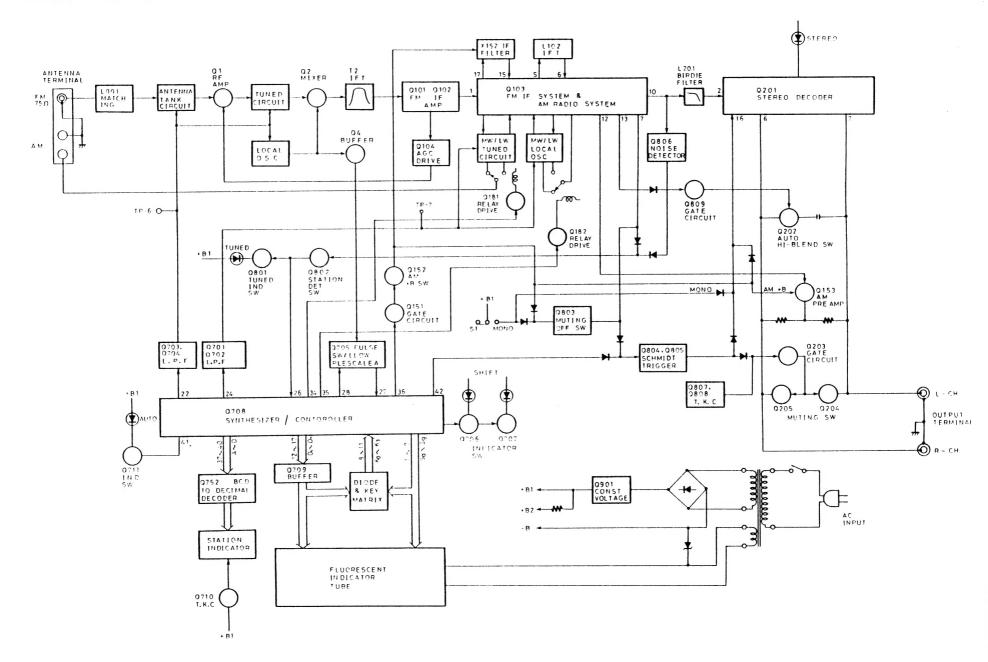
Worldwide models are equipped with a voltage selector to conform with local power supplies. This switch is located on the back panel. Be sure to set this switch to match the voltage of the power supply in your area before turning the power switch on.

This swith is set to 220V at the factory. Voltage is changed by sliding the groove in the switch with the screwdriver to the right or left. Confirm that the switch has been moved all the way to the right or left before turning the power switch on.

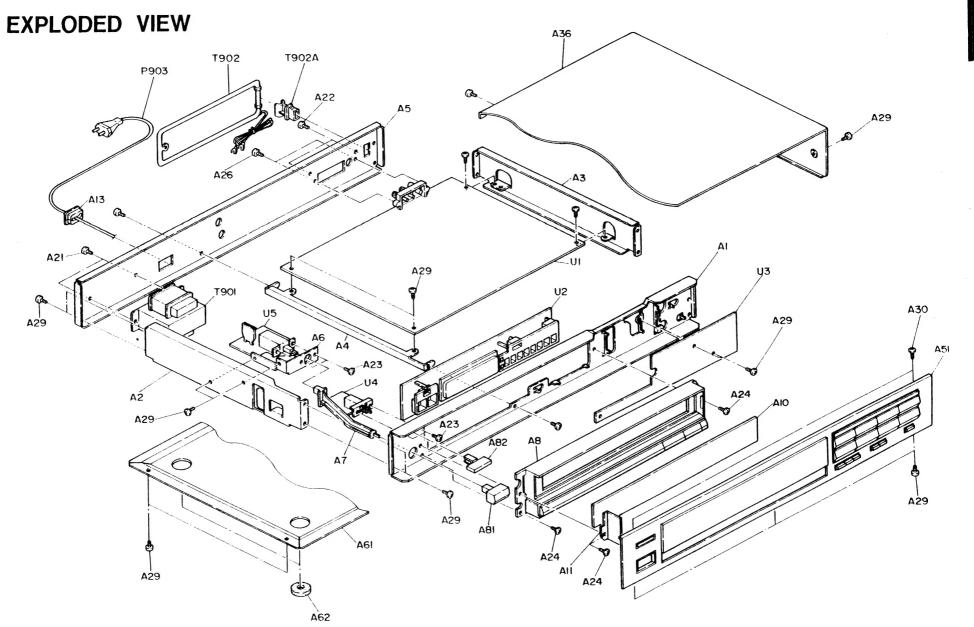
#### 3. Memory preservation

This unit does not require memory preservation batteries. A built-in memory power back-up system preserves contents of the memory during power failures and even when the unit is unplugged. The unit must be plugged in and the power switch turned on and off once in order to charge the back-up system. Note that since this is not a permanent memory,the power switch must be turned on and off a few times each month to keep the back-up system operative. The period of time during which memory contents are preserved after power has last been turned off varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of 3 to 4 weeks (a minimum of 2 weeks) after the last time power has been turned off. This period is shorter when the unit is exposed to very high humidity or used in an area with an extremely humid climate.

## **BLOCK DIAGRAM**



T-4038



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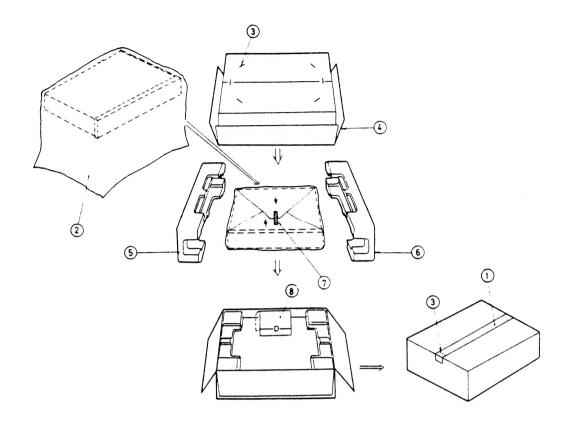
## PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
Al	27110247B	Front bracket
A2	27115130E	Side bracket L
A3	27115169	Side bracket R
A4	27130395	Bracket,pc board
A5	27120829	Back panel (G)
	27120830	Back panel (W)
	27120842	Back panel (Q)
A6	27140990A	Bracket,power switch
A7	27273030C	Joint L
Λ8	28322046-1A	Holder ass'y
A10	28133162A	Back plate
A11	28160110	Holder
A13	27300750	<b>∆Strainrelief</b>
A21	838440089	4TTB+8C(BC),Tapping screw
A22	834230108	3TTS+10B(Ni),Tapping screw
A23	82143006	3P+6FN(BC),Pan head screw
A24	831430088	3TTW+8B(BC),Tapping screw
A26	834430108	3TTS+10B(BC),Tapping screw
A27	82143006	3P+6FN(BC),Pan head screw
		⟨W⟩
A28	82142604	2.6P+4F(BC),Pan_head
		screw (W)
A29	834430068	3TTS+6B(BC),Tapping screw
A30	838430068	3TTB+6B(BC),Tapping screw
A36	28181282A	Top cover (B)
	28184281	Top cover (S)
A51	18651121	Front panel ass'y (B)
	18644121	Front panel ass'y (S)
A61	27170224	Bottom board
A62	27175011C	Leg
A81	28321905B	Knob,Power (B)
	28321928-1	Knob, Power (S)
Λ82	28322094A	Knob,Mode (B)
	28322093A-1	
S902	25065123	NSS-1258P,Voltage
		selector switch (W)
P903	253129 or	AAS-CEE,Power supply
	253127	cord (G/W)
	253118	AAS-SAA,Power supply
		cord (Q)

REF.NO.	PART NO.	DESCRIPTION
T901	2300089	NPT-915G,Power transformer
		<b>⟨G</b> ⟩
	2300090	NPT-915DG, Power
		transformer (W)
	2300091 A	NPT-915Q,Power transformer
		<b>⟨Q</b> ⟩
T902	232085	NMA 3034,AM loop antenna
T902A	27190105	Holder,antenna
Ul	18644500-1A	NARF-2600-1A,Main pc board
		ass'y (G/Q)
	18640500 ·1A	NARF-2600-1B,Main pc board
		ass'y (W)
U2	18658501-1	NADIS-2601-1,Display pc
		board ass'y
U3	18644502 · 1A	NASW-2602-1A,Function
		switch pc board ass'y
U4	18658503-1	NASW 2603-1, Muting switch
		pc board ass'y
U5	18644504~1A	NASW-2604-1A,Power switch
		pc board ass'y
U6	18640505-1	NASW 2605 1,Band selector
		switch pc board ass'y (W)

NOTE THE COMPONENTS IDENTIFIED BY MARK A
ARE CRITICAL FOR RISK OF FIRE AND
ELECTRIC SHOCK. REPLACE ONLY WITH
PART NUMBERS SPECIFIED.

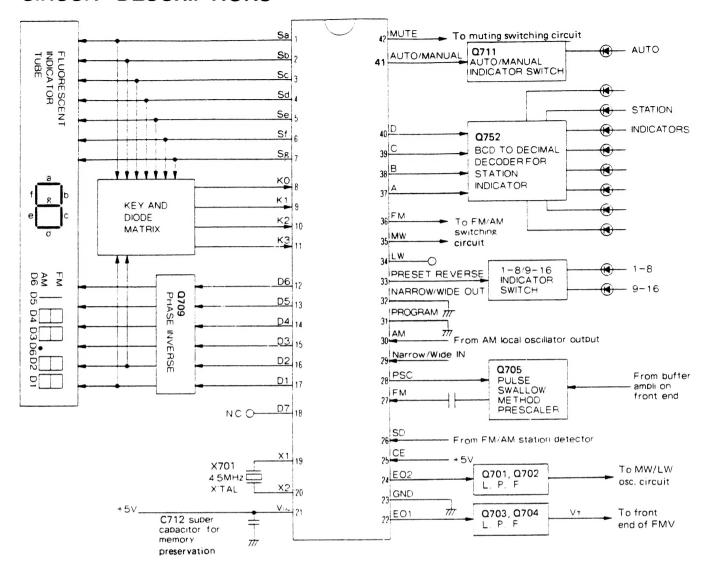
# PACKING VIEW



REF.NO.  1 2 3 4 5 6	PART NO. 260012 29100051 282301 29051283 29051284 29090532B 29090533E	DESCRIPTION 50×700mm.Damplon tape 420×750mm.Poly-vinyl bag Sealing hook Master carton box <s` <b="" box="" carton="" master=""> Pad R Pad L</s`>	REF.NO.	PART NO. Worldwide me 29340984 292064A 232085 2010095 25055040 29100006A	DESCRIPTION odel Instruction manual FM antenna NMA-3034.AM loop antenna Connection cord CV-K-2,Conversion plug 250 ×350mm.Poly-vinly bag
7 8	29110032 Accessary bag 220V model 29340984 292092 232085 2010095 29100006A	W=15mm.Adhesive tape g ass'y Instruction manual FM antenna NMA-3034.AM loop antenna Connection cord 250 ×350mm.Poly-vinly bag		240V model 29340984 292092 232085 2010095 25060083 29100006A	Instruction manual FM antenna NMA-3034,AM loop antenna Connection cord Antenna adaptor 250 ×350mm.Poly-vinly bag

NOTE: S:Only Black model (B):Only Black model

## CIRCUIT DESCRIPTIONS



Pin No.	Symbol	Terminal	Description				
1 – 7	Sa – Sg	Segment outputs	Display tube signal terminal output and key return signal source terminals; active high. Since these terminals can handle 30V, they are connected directly to the segment terminals of the fluorescent display tube.				
8 – 11	K0 – K3	Key return signal inputs					
12 – 18	D1 – D7	Digit outputs	Display tube digit output signal terminals; active low. D1 and D2 are used the key return signal source.				
19,20	X1, X2	X'tal	Connect to the 4.5MHz crystal oscillator.				
21	$V_{ m DD}$	Power source input	Device power source terminal; supplies 5V during normal operation and 2.5V from the super capacitor C712 for memory preservation.				

Pin No.	Symbol	Terminal	Description
22, 24	E01, E02	Error outputs	Charge pump output of the phase detector with constitutes the PLL. Hight level is output when the divided oscillation frequency is higher than the reference frequency. In the opposite case, low level is output. Floating occures when the frequencies match. The output is applied to the variable capacitor diode in the front end through the low pass filters Q701, Q702, Q703 and Q704. The output from both terminals is same and E01 is used to FM and E02 is used to MW/LW
23	GND	Ground	
25	CE	Chip enable	Device selection signal input terminal. High level Normal operation Low level Memory preservation
26	SD	Station detector signal input	Input terminal for detecting whether or not a broadcast signal is being received during auto-tuning. Stopped by the high level.
27	FM	FM local oscillator signal input	Input terminal for FM local oscillator is divided by 1/16 or 1/17 by prescaler Q705.
28	PSC	Pulse swallow control output	This terminal outputs a signal that switches the prescaler division ratio of Q705 to 1/16 or 1/17 when the pulse swallow method is used for division. (FM only)
29	NARROW/ Wide out	IF band width output	Terminal for switching narrow and wide of IF band width.  Not used.
30	AM	AM local oscillator signal input	Terminal for input of the AM local oscillator signal.
31	PROGRAM	Program selection signal output	Terminal for indicator output whether or not the program mode.  Not used.
32	NARROW/ Wide out	IF band width switching output	Terminal for specifications output of IF band width. Not used.
33	Preset Reverse	Preset reverse indication output	Terminal for indication output whether M1 - M8 or M9 - M16 the preset key
34	LW	Band switching	Terminals for signal output switching of each band. High level is output from
35	MW	signal outputs	terminal of FM (pin no. 36) and low level is output from other terminals (pin no. 34 & 35) during FM reception.
36	FM		
37 38 39 40	A B C D	Preset station indication outputs	Terminals for BCD code output of preset station indicator.
41	AUTO/ MANUAL	Auto/Manual indication output	Terminal for indication output whether or auto the tuning mode.  This terminal becomes high during auto mode and low during manual mode.
42	MUTE	Muting output	Output terminal which mutes the shock noise occurring when the PLL is released; active high. The muting signal is output as shown below. UP/DOWN of manual/auto mode, preset memory is recalled, band switching and preset scan.

M

D.

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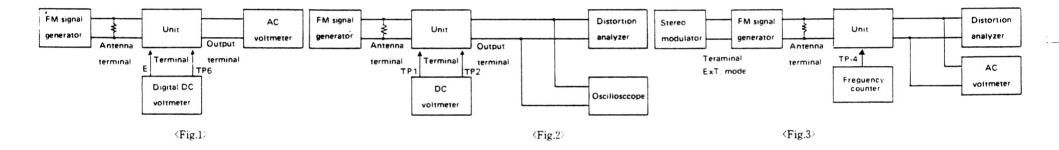
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## **ADJUSTMENT PROCEDURES**

#### FM section

Item	Step	Connection of instrument	FM SG output	Stereo modu- lator output	Tuned frequency	Output indicator	Adjustment point	Adjust for	Remarks
Front	1	Fig.1			87.50MHz	Digital DC voltmeter	Tl	$1.2\mathrm{V}\pm0.4\mathrm{V}$	Usually not necessary
end	2		107.9MHz 1kHz,75kHz devi.		107.90MHz	AC voltmeter	TC1 TC2	Maximum output	to adjust.
IF -	1		98.0MHz 1kHz.75kHz devi.		00 000411	DC voltmeter	L102 Primary	0V ± 20mV	Set the mode switch to MONO. Repeat the steps 1 and 2 until no
1 F	2		65dBf(60dB)			Distortion analyzer	L102 Minimum Secondary		further adjustment is necessary.
v c o		Fig.3	98.0MHz 1kHz,75kHz devi. 65dBf(60dB)		98.00MHz	Frequency counter	R214	19kHz±10Hz	Set the mode switch to STEREO.
Stereo distortion		Fig.3	98.0MHz Ext. modulation 65dBf(60dB)	L+R 1kHz 67.5kHz devi.	98.00MHz	Distortion analyzer	T2	Minimum	
Stereo	1		98.0MHz	Lch. 1kHz	00 007 577	Rch. AC voltmeter	<b>D</b> 204	Minimum	Maximum and same
separation	2		Ext. modulation 65dBf(60dB)	Rch. 1kHz	98.00MHz	Lch. AC voltmeter	R204	Minimum	separation
Tuned indicator level		Fig.2	98.0MHz 1kHz,75kHz devi. 20.2dBf(15dB)		98.00MHz	Tuned indicator	R118	Light on	
Auto Hi-blend level		Fig.2	98.0MHz 1kHz,75kHz devi. 29.2dBf(24dB)		98.00MHz	Hi-blend switch (Q202)	R825	off	



#### MW section

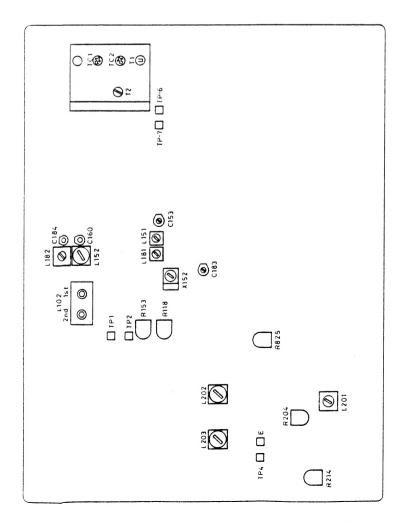
Step	AM SG output	Tuned Frequency	Output indicator	Adjustment point	Adjust for	Remarks	
1		522kHz	Digital D C	L151	$1.3\mathrm{V}\pm0.1\mathrm{V}$	Repeat the steps 1 and 2 until no	
2		1611kHz	voltmeter	C153	$9.5\mathrm{V}\pm0.1\mathrm{V}$	further adjustment is necessary.	
3	603kHz.60dB/m 400Hz 30% mod.	603kHz	A C	L152	Maximum	Repeat the steps 3 and 4 until no further adjustment is necessary.	
4	1404kHz,60dB/m 400Hz 30% mod.	1404kHz	voltmeter	C160	Maximum		
5	999kHz,60dB/m 400Hz 30% mod.	999kHz	A C voltmeter	X152	Maximum		
6	999kHz,64dB/m 400Hz 30% mod.	999kHz	TUNED indicator	R153	Light on		

AM Signal generator  AM LOOP antenna  AM LOOP antenna  Digital DC voltmeter
(fig. 5)

#### LW section

10

Step	AM SG output	Tuned Frequency	Output indicator	Adjustment point	Adjust for	Remarks	
1		146kHz	Digital	L181	$1.3\mathrm{V} \pm 0.1\mathrm{V}$	Repeat the steps 1 and 2 until no	
2 353kH2		353kHz	D C voltmeter	C183 $6.0V \pm 0.1V$		further adjustment is necessary.	
3	164kHz,60dB/m 400Hz 30% mod.	164kHz	АС	L182	Maximum	Repeat the steps 3 and 4 until no	
4	353kHz.60dB m 353kHz 400Hz 30% mod		voltmeter	Ć184	Maximum	further adjustment is necessary.	

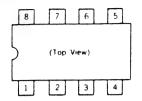




## BLOCK DIAGRAM OF IC

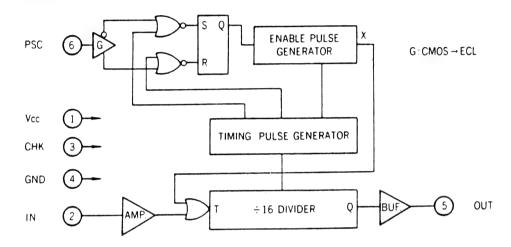
#### μPB553AC(Prescaler)

#### Pin Connection

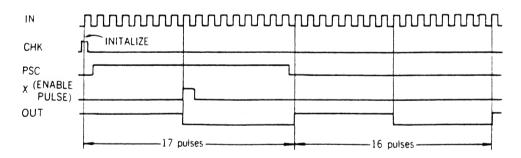


- 1 Pin 1 (Vcc)..... + 5 volts Supply
- 2. Pin 2 (IN)....FM local oscillator signal input
- 3. Pin 3 (CHE).....Check terminal
- 4. Pin 4 (GND).....Ground terminal
- 5. Pin 5 (OUI).....Prescaler terminal
- 6. Pin 6 (PSC).....Prescaler control terminal 7. Pin 7.8.....Not connected

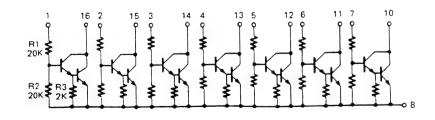
#### Block Diagram



#### Timing Chart

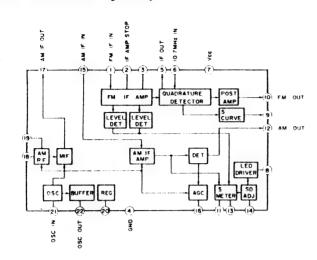


#### $\mu$ PA80C(Buffer amplifier)

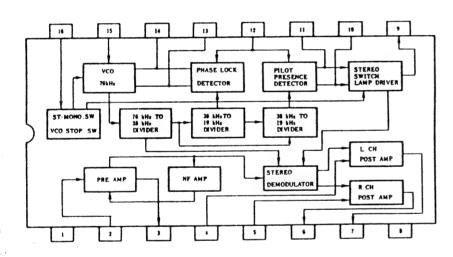


## **BLOCK DIAGRAM**

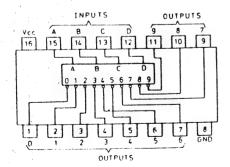
LA1265(AM radio/FM IF system)



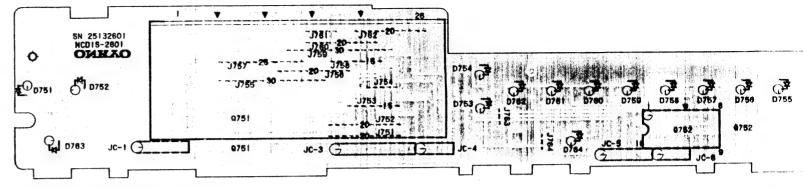
#### μPC1161C3(Stereo decoder)



#### 74LS145(BCD to decimal decoder)



## PRINTED CIRCUIT BOARD VIEW FROM BOTTOM SIDE



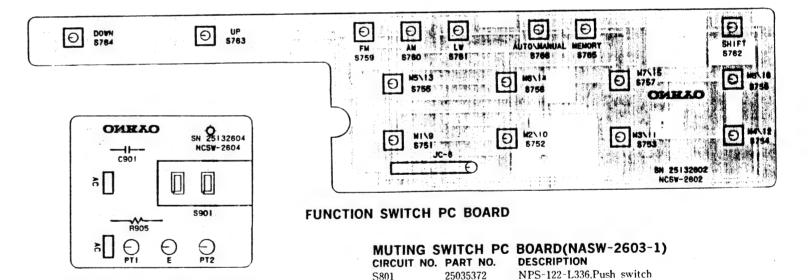
#### DISPLAY PC BOARD

# DISPLAY PC BOARD(NADIS-2601-1) CIRCUIT NO. PART NO. DESCRIPTION

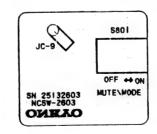
	Fluorescent t	ube
Q751	212031	FIP-7G8D
	IC	
Q752	222741451	74LS145
	L.E.Ds	
D751-D753	225137CG,	SEL2413CG.
D755-D762	225137DG or	SEL2413DG or
D764	225137DY	SEL2413DY
D754	225148	SEL2913K
D763	225141	SEL2213C
	Holders	
	27190370-1	LED-3
	27190441	LED-11

# FUNCTION SWITCH PC BOARD(NASW-2602-1A) CIRCUIT NO. PART NO. DESCRIPTION

66 25035389 NPS-111-S353,Push switches



#### POWER SWITCH PC BOARD



#### MUTING SWITCH PC BOARD

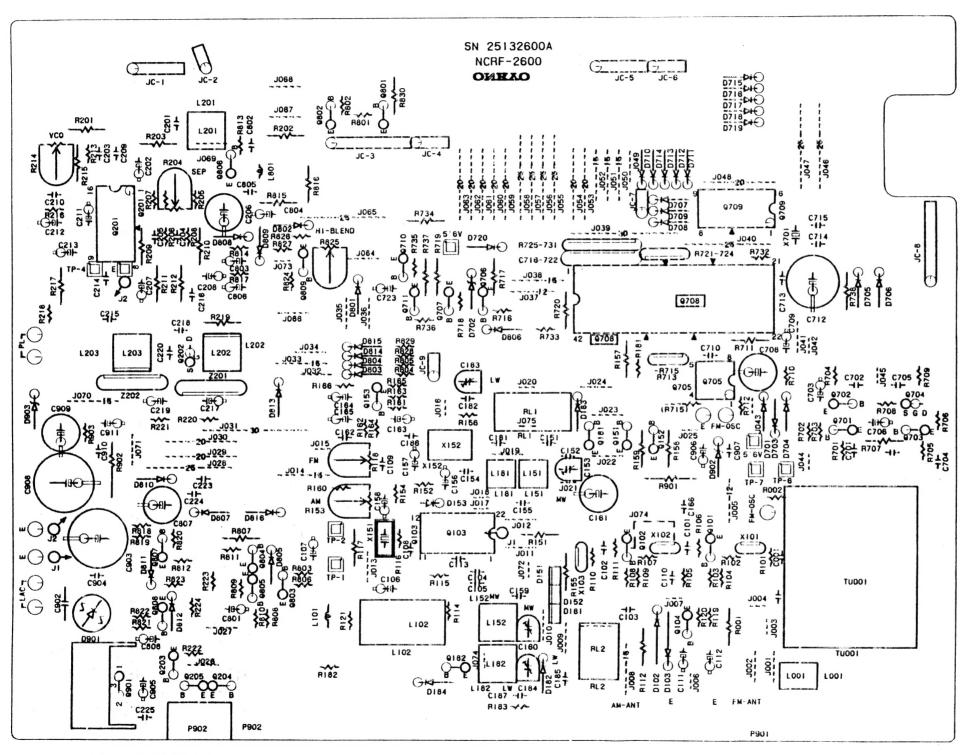
POWER SWITCH PC BOARD(NASW-2604-1A) CIRCUIT NO. PART NO. DESCRIPTION

C901a 27300601 △SB-1925,Cover,capacitor S901 25035295 △NPS-111-L261P,Power switch 25060092 NTM-1S33,Terminal GND

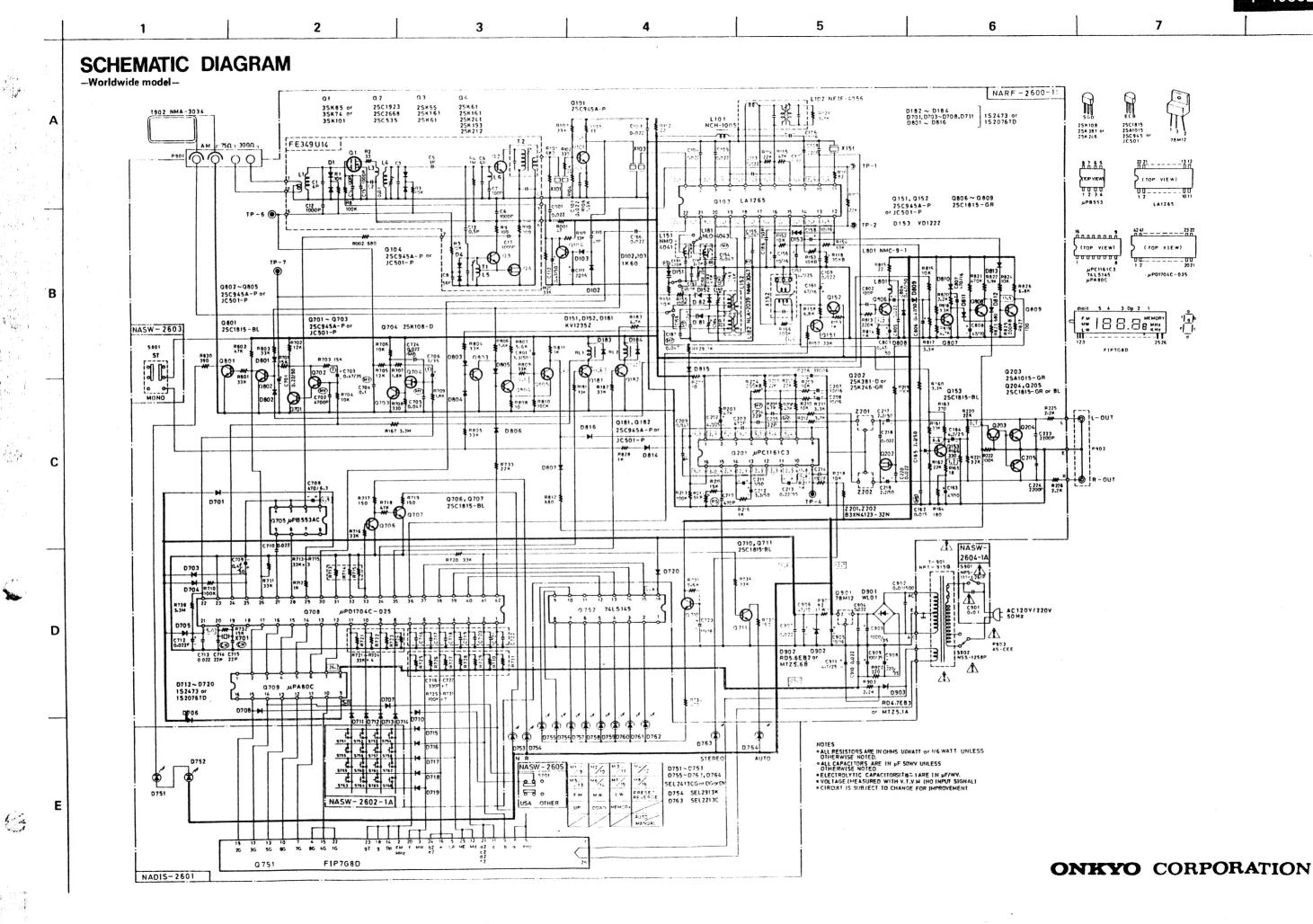
NOTE: THE COMPONENTS IDENTIFIED BY MARK A
ARE CRITICAL FOR RISK OF FIRE AND
ELECTRIC SHOCK. REPLACE ONLY WITH
PART NUMBERS SPECIFIED.

-14-

## PRINTED CIRCUIT BOARD VIEW FROM BOTTOM SIDE



MAIN CIRCUIT PC BOARD



# PRINTED CIRCUIT BOARD-PARTS LIST

MAIN PC BOARD(NARF-2600-1A/1B)								
CIRCUIT NO.	BOAKD(NA	DESCRIPTION		CIRCUIT NO.	PART NO.	DESCRIPTION		
CIRCUIT NO.		DESCRIPTION		CINCOTT NO.	Transformer			
COL LOUIS	Front end	FE349U14 (W)		L102	233351	NFIF-4056		
TU001	240061	FE416U33 (G)		1.102	Ceramic filte			
	240059	LE410033 /Q/		X101,X103	3010071	SFE10.7MA5 (W)		
()102	ICs 222912	LA1265		X101-X103	3010043	SFE10.7MM (G)		
Q103	222678	μPC1161C3		X151	3010076	BFU450C		
Q201	222619	μPB553AC		X152	3010075	SFL450B3 (W)		
Q705	222763	μPD1704C-025		X152	3010058	BCFLZ450A (G/		
Q708	222801	μPA80C			X'tal			
Q709 Q901	222780122	78M12		X701	3010091	XTL4.5M		
Q301	Transistors	7011112			Filters			
Q101	2210746	2SC945A(P) <w></w>		Z201,Z202	3020016	B3×N4123-32N ⟨W⟩		
Q101 Q101	2211723	2SC1923(O) 〈G〉			Capacitors			
Q102	2210746	2SC945A(P) 〈G〉		C106	352741009	$10\mu$ F,16V,Elect.		
Q104,Q151	2210746 or	2SC945A(P) or		C107	352780109	1 μF,50V,Elect.		
Q152	2212484	JC501(P)		C111	352742209	$22\mu$ F,16V,Elect.		
Q153	2211256	2SC1815(BL)		C112	352784799	0.47μF,50V,Elect.		
Q181,Q182	2211256	2SC1815(BL)		C151	370134714	470pF ±5%,100V,APS		
Q202	2212304 or	2SK381(D) or		C153,C160	3060010	NTC-20P09,Trimmer		
•	2211945	2SK246(GR)		C154	352780109	$1 \mu F,50V$ ,Elect.		
Q203	2211455	2SA1015(GR)		C156	352741009	$10\mu$ F,16V,Elect.		
Q204,Q205	2211255 or	2SC1815(GR) or		C157	352750479	$4.7 \mu \text{F},25\text{V},\text{Elect}.$		
	2211256	2SC1815(BL)		C158	352741009	$10\mu$ F,16V,Elect.		
Q701,Q702	2210746 or	2SC945A(P) or		C161	352744709	$47\mu$ F,16V,Elect.		
	2212484	JC501(P)		C163	352734709	$47\mu$ F,10V,Elect. $\langle W \rangle$		
Q703	2210746 or	2SC945A(P) or		C163	352721019	100 $\mu$ F, 6.3V,Elect. $\langle G \rangle$		
	2212484	JC501(P)		C164	352750479	4.7 μF,25V,Elect.		
Q704	2212294	2SK108(D)		C165	352780229	2.2 μF,50V,Elect.		
Q706,Q707	2211256	2SC1815(BL)		C181	370132414	240pF ±5%,100V,APS		
Q710,Q711	2211256	2SC1815(BL)		C183	3060011	NTC45P10,Trimmer		
Q801	2211256	2SC1815(BL)		C184	3060010	NTC20P09,Trimmer		
Q802 - Q805	2210746 or	2SC945A(P) or		C202	352750479	4.7 μF,25V,Elect.		
	2212484	JC501(P)		C206	352743319	330 μF,16V,Elect.		
Q806-Q809	2211255	2SC1815(GR)		C207,C208	352741009	10μF,16V,Elect.		
	Diodes	117.00		C210	370134714	470pF ±5%,100V,APS		
D102,D103	223132	1K60		C211	352780109	1 μF,50V,Elect. 3.3 μF,50V,Elect.		
D151,D152	223158	KV1235Z		C212 C213	352780339 352782299	0.22μF,50V,Elect.		
D181	1000000	1/1/1999		C217,C219	352780229	2.2 μF,50V,Elect.		
D153	4000068	VD1222		C701	352782299	0.22μF,50V,Elect.		
D182-D184	223150,	US1040, 1S2473 or		C701	395164797	$0.47\mu$ F,35V,Tantalum		
D701	223124 or 223145	1S2076TD		C706	395160107	1 μF,35V, Tantalum		
D703~D708 D711~D720	223145	US1040,		C708	352724719	470 μF, 6.3V, Elect.		
D801 D816	223124 or	1S2473 or		C709	352784799	0.47μF,50V,Elect.		
17001 17010	223124 01	1S2076TD		C712	3020017	0.022F,5V,Super		
D710	223150,	US1040,		C716-C722	3020024	B8×C0116-32N,Block		
17710	223124 or	1S2473 or		C723	352741009	10μF,16V,Elect.		
	223145	1S2076TD (W)		C801	352780339	3.3 μF,50V,Elect.		
1)901	223862	WL01		C803,C804	352784799	0.47 µ F,50V, Elect.		
D902	2243152 or	MTZ5.6B or		C806	352784799	0.47μF,50V,Elect.		
17302	2239472	RD5.6EB2		C807	352744719	470 μF,16V,Elect.		
D903	2239433	RD4.7EB3		C808	352734709	47μF,10V,Elect.		
1,0,00	Coils			C903	352761029	1,000 μF,35V,Elect.		
1.001	233312	NFA-3051 (G)		C905	352741009	10μF,16V,Elect.		
1.101	233105	NCH-1005		C906	352734709	47μF,10V,Elect.		
1.151	232126	NMO-4041		C908	352762219	220 μF,35V,Elect.		
1.152	232111	NMA-3047		C909	352761019	100 μF,35V,Elect.		
1.181	231095	NLO-4043		C911	352750479	4.7 μF,25V,Elect.		
1.182	232092	NLA-2039				F- / /		
1.201	233236	NMC-6027 (G)						
L202,L203	233294	NMC 5040 (G)						
1.801	233031	NMC-9-1						

CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R118	5215062	N08HR30KBC,Semi-fixed
R153	5215045	N08HR10KBC,Semi-fixed
R204	5215048	N08HR200KBC,Semi-fixed
R214	5215044	N08HR5KBC,Semi-fixed
R713-R715	49121333403	33kohm×3,1/8W,Network
R721-R724	49121333404	33kohm×4,1/8W,Network
R725-R731	49121104407	100kohm ×7,1/8W,Network
R825	5215048	N08HR200KBC,Semi-fixed
R901	441628204	82ohm,1W,Metal oxide film
	Relaies	
RL1	25065174	NRL-2P1A-DC12-09
RL2	25065092	NRL-1P1A-DC12-04

NOTE: G:Only 220V and 240V models W:Only Worldwide model

-MEMO-

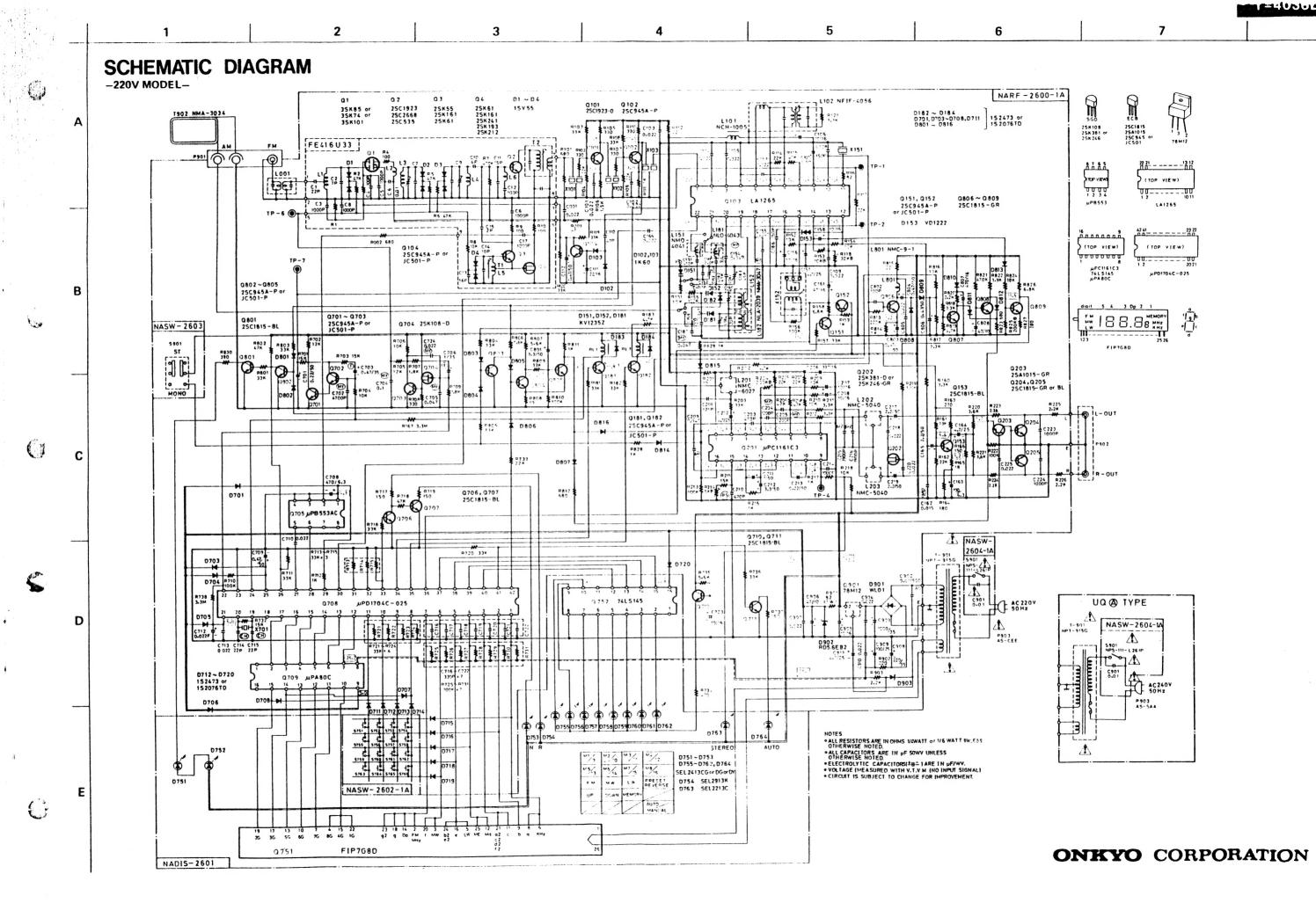
CIRCUIT NO.	PART NO.	DESCRIPTION
	Radiator	
	27160179	RAD-57
	Screw	
	834430068	3TTS+6B(BC), Tapping, Radiator
	Terminals	
P901	25060085	NTM-4PDMN29,Antenna (W)
P901	25060087	NTM-2PDMN31,Antenna (G)
P902	25045141	NPJ-2PDBL54,Output

BAND SELECTOR SWITCH PC BOARD(NASW-2605-1)
(Only Worldwide model)
CIRCUIT NO. PART NO. DESCRIPTION
S701 25065267 NSS-22109,Slide switch

1.801

233031

NMC-9-1



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